

**ABSTRACT**

A software tool in a graphical modeling environment guides a user through the process of preparing a graphical model for embedded code generation. The software tool prompts the user to specify code generation goals for the embedded code and provides  
5 feedback to the user regarding the compliance of the graphical model with the specified goals. The software tool can perform selected checks and analysis on the graphical model prior to code generation to ensure compliance with specified conditions. The software tool update parameters of the graphical model to comply with the specified goals, to produce optimized target software based on the model.

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